

| Ref # | Hits | Search Query | DBs | Default Operator | Plurals | Time Stamp |
|-------|------|---|---|------------------|---------|------------------|
| L1 | 1 | "20030085962".pn. and small and gradation | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:13 |
| L2 | 3926 | (347/9,10,11,14,68).CCLS. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/08/17 09:11 |
| L3 | 2613 | L2 and (pzt piezo\$ transducer) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L4 | 723 | L2 and (pzt piezo\$ transducer)and (actuator) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L5 | 3926 | (347/9,10,11,14,68).CCLS. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/08/17 09:11 |
| L6 | 723 | L5 and (pzt piezo\$ transducer)and (actuator) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L7 | 55 | L5 and (pzt piezo\$ transducer)and (actuator near control\$3) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L8 | 123 | iwao-naoto.in. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L9 | 4 | matsumoto-ayumu.in. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L10 | 14 | iwao-naoto.in. and (actuator) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |

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| L11 | 27 | ("4104646" "4112433" "4266232" "4291316").PN. OR ("4369455").URPN. | US-PGPUB; USPAT; USOCR | OR | ON | 2005/08/17 09:11 |
| L12 | 36 | ("4104646" "4161670" "4284996" "4352114" "4369455" "4393384" "4424520" "4491851" "4509059" "4523201" "4532200" "4563689" "4577201" "4639735" "4714935" "4716418" "4743924" "4752790").PN. OR ("4897665").URPN. | US-PGPUB; USPAT; USOCR | OR | ON | 2005/08/17 09:11 |
| L13 | 260617 | "36" and pulse! | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L14 | 33 | L12 and pulse! | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L15 | 18 | L12 and (pulse! adj width!) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L16 | 11 | L12 and ((pulse! adj width!) same voltage) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L17 | 9 | L12 and ((pulse! adj width!) with voltage) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L18 | 36606 | ((pulse! adj width!) with voltage) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L19 | 3777 | ((pulse! adj width!) with voltage) and (pzt piezo\$ transducer) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L20 | 799 | L19 and actuator | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |

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| L21 | 28 | propagat\$4 and L7 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L22 | 23 | (US-20010043242-\$ or US-20040095404-\$ or US-20030164868-\$ or US-20010043241-\$).did. or (US-4369455-\$ or US-4897665-\$ or US-6257685-\$ or US-6527354-\$ or US-5764256-\$ or US-4563689-\$ or US-6419336-\$ or US-6412923-\$ or US-6386665-\$ or US-6350003-\$ or US-6254213-\$ or US-6099103-\$ or US-5903286-\$ or US-5736994-\$). did. or (JP-11020165-\$ or JP-11170516-\$ or JP-2001310461-\$ or JP-2001315330-\$ or JP-2001322272-\$).did. | US-PGPUB; USPAT; JPO | OR | ON | 2005/08/17 09:11 |
| L23 | 15 | L22 and propagat\$4 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L24 | 2 | ("6488358").PN. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/08/17 09:11 |
| L25 | 120 | 347/10.ccls. and (pzt pezo\$ transducer) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L26 | 14 | (347/10.ccls. and (pzt pezo\$ transducer)) and propagat\$4 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L27 | 3926 | (347/9,10,11,14,68).CCLS. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/08/17 09:11 |
| L28 | 2613 | L27 and (pzt piezo\$ transducer) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |

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| L29 | 6096 | (pzt piezo\$ transducer) and (actuator) and (propagat\$4) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L30 | 3350 | ((pzt piezo\$ transducer) with (actuator)) and (propagat\$4) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L31 | 39 | (((pzt piezo\$ transducer) with (actuator)) and (propagat\$4)) with pulse | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L32 | 20 | (((pzt piezo\$ transducer) with (actuator)) and (propagat\$4)) with pulse) not 347/9,10,11,68.ccls. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L33 | 3243 | (((pzt piezo\$ transducer) with (actuator)) and (propagat\$4))) not 347/9,10,11,68.ccls. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L34 | 20 | (((pzt piezo\$ transducer) with (actuator)) and (propagat\$4))) and 310/311.ccls. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L35 | 444 | (propagat\$4) and (347/9,10,11,68, 14.ccls. 310/311.ccls.) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L36 | 124 | (pulse same propagat\$4) and (347/9,10,11,68,14.ccls. 310/311. ccls.) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L37 | 115 | (347/9,10,11,68.ccls.) and ((pulse adj width) same (chamber chanel)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L38 | 117 | (347/9,10,11,68.ccls.) and ((pulse adj width) same (chamber chanel cavity)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |

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| L39 | 4 | (("5805177") or ("5736994")).PN. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/08/17 09:11 |
| L40 | 39 | (347/9,10,11,68.ccls.) and (((pulse adj width) same (chamber chanel cavity)) same (less greater shorter equal)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L41 | 3 | ("5805177" "6086189" "6217159").PN. | US-PGPUB; USPAT; USOCR | OR | ON | 2005/08/17 09:11 |
| L42 | 5 | (("6260959") or ("6523932")).PN. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/08/17 09:11 |
| L43 | 5 | (("6260959") or ("6523923")).PN. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/08/17 09:11 |
| L44 | 1 | (US-6099103-\$).did. | USPAT | OR | ON | 2005/08/17 09:11 |
| L45 | 1 | L44 and nozzle | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L46 | 1 | L44 and (nozzle same chamber) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L47 | 2 | "20040090476".pn. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L48 | 6 | (347/9,10,11,68.ccls.) and (((pulse adj width) same (chamber chanel cavity)) same (microsecond (micro adj second))) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L49 | 6 | (347/9,10,11,68.ccls.) and (((pulse adj width) same (chamber chanel cavity)) same (microsecond (micro adj second ".mu.s"))) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |

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| L50 | 117 | ((pulse adj width) same (chamber chanel cavity)) same (microsecond (micro adj second ".mu.s"))) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L51 | 1035 | ((propagation same time) same (microsecond (micro adj second ".mu.s"))) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L52 | 11 | "347".clas. and ((propagation same time) same (microsecond (micro adj second ".mu.s"))) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L53 | 24 | "347".clas. and ((propagation same time) same (microsecond ms (micro adj second) ".mu.s"))) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L54 | 24 | "347".clas. and ((propagation same time) same (microsecond ms (micro adj second) ".mu.s" "m/sec"))) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L55 | 6 | "347".clas. and (((one adj way) one-way) near propagation) same (microsecond ms (micro adj second) ".mu.s"))) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L56 | 46 | "347".clas. and (((one adj way) one-way) near propagation) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L57 | 0 | ".mu.sec." | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L58 | 0 | ".mu.s" | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L59 | 6 | "347".clas. and (((one adj way) one-way) near propagation) same (microsecond ms (micro adj second) mu)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |

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|-----|--------|---|---|----|----|------------------|
| L60 | 198881 | mu | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L61 | 1616 | "347".clas. and (pressure adj wave) and (microsecond (micro adj second) ms mu) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L62 | 96 | "347".clas. and (pressure adj wave) same (microsecond (micro adj second) ms mu) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L63 | 1 | "6099103".pn. and gradation | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L64 | 2 | 11-170515 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L65 | 29 | (US-20010043241-\$ or US-20010043242-\$ or US-20020036667-\$ or US-20030164868-\$ or US-20040095404-\$ or US-20050024400-\$ or US-20040090476-\$).did. or (US-4369455-\$ or US-4563689-\$ or US-4897665-\$ or US-5736994-\$ or US-5764256-\$ or US-5903286-\$ or US-6099103-\$ or US-6254213-\$ or US-6257685-\$ or US-6296341-\$ or US-6350003-\$ or US-6386665-\$ or US-6412923-\$ or US-6419336-\$ or US-6464315-\$ or US-6488349-\$ or US-6527354-\$).did. or (JP-11020165-\$ or JP-11170516-\$ or JP-2001310461-\$ or JP-2001315330-\$ or JP-2001322272-\$).did. | US-PGPUB; USPAT; JPO | OR | ON | 2005/08/17 09:11 |
| L66 | 3 | L65 and (waveform same gradation) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |

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| L67 | 13 | L65 and (waveform and gradation) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L68 | 819 | (gradation and (pulse adj generator)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L69 | 186 | ((pixel same gradation) and (pulse adj generator)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L70 | 0 | "20040090476".pn. and ((droplet adj volume) same determinin) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L71 | 1 | "20040090476".pn. and ((droplet adj volume) same determining) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L72 | 28 | ((droplet adj volume) same determining) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L73 | 29 | (US-20010043241-\$ or US-20010043242-\$ or US-20020036667-\$ or US-20030164868-\$ or US-20040095404-\$ or US-20050024400-\$ or US-20040090476-\$).did. or (US-4369455-\$ or US-4563689-\$ or US-4897665-\$ or US-5736994-\$ or US-5764256-\$ or US-5903286-\$ or US-6099103-\$ or US-6254213-\$ or US-6257685-\$ or US-6296341-\$ or US-6350003-\$ or US-6386665-\$ or US-6412923-\$ or US-6419336-\$ or US-6464315-\$ or US-6488349-\$ or US-6527354-\$).did. or (JP-11020165-\$ or JP-11170516-\$ or JP-2001310461-\$ or JP-2001315330-\$ or JP-2001322272-\$).did. | US-PGPUB; USPAT; JPO | OR | ON | 2005/08/17 09:11 |

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| L74 | 18 | L73 and small | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L75 | 2 | L73 and ((large near small) (medium near small)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L76 | 1023 | gradation and ((large near small) (medium near small)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L77 | 169 | "347".clas. and gradation and ((large near small) (medium near small)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/17 09:11 |
| L78 | 105 | "347".clas. and gradation and ((large near small) (medium near small)) | USPAT | OR | ON | 2005/08/17 09:11 |